ABSTRACT OF THE DISCLOSURE

The present invention is directed to an isolated DNA molecule encoding a *Xanthomonas campestris* hypersensitive response elicitor protein or polypeptide. The hypersensitive response elicitor protein or polypeptide of the present invention and the isolated DNA molecule that encodes such protein have the following uses: imparting disease resistance to plants, enhancing plant growth, controlling insects on plants, imparting stress resistance, imparting post-harvest disease resistance, maximizing the benefit of or overcoming a yield penalty associated with a transgenic trait, inhibiting desiccation of cuttings from ornamental plants, promoting early flowering of an ornamental plant, and harvesting cuttings from ornamental plants. These can be achieved by applying the hypersensitive response elicitor in a non-infectious form to plants or plant seeds (or cuttings or fruits or vegetables harvested from such plants) or by expression of the hypersensitive response elicitor in transgenic plants. Transgenic plants, plants seeds, and cuttings from such transgenic plants are also disclosed.